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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,390	12/22/2000	Tony Mark	871.0011 USU	1123
29683	7590	01/25/2005	EXAMINER	
HARRINGTON & SMITH, LLP			DAO, MINH D	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	

2682

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/745,390	Applicant(s) MARK ET AL.	
	Examiner MINH D DAO	Art Unit 2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/08/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-15, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US 6,687,518) in view of Halperin et al. (US 6,115,616) and further in view of Little (US 4,740,431).

Regarding claim 1, Park teaches a mobile station (see fig. 1; col. 23, lines 24-27), comprising: a communication part that comprises a controller (see fig. 1, the GMPSC

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system; col. 3, lines 1-11), an RF transceiver (see fig. 5, RF terminal 130; col. 7, lines 16-18) and an antenna (see fig. 6, antenna 410); and a information entry part comprising a keypad or keyboard module that is detachable from said communication part and that is coupled, whether attached or detached, through a wireless link to said communication part for conveying keystroke information from said information entry part to said communication part (see figs. 2 and 3; col. 3, lines 39-46; col. 3, lines 57-67; col. 4, lines 42-48). However, Park does not mention that the information entry part is self-powered. Halperin, in an analogous art, teaches this limitation (col. 4, lines 13-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the keypad that uses a Lithium thin film battery of Halperin to in order to minimize the space occupied by the power source as taught by Halperin.

Still regarding claim 1, Halperin does not mention that the Lithium thin film battery is a solar cell. Little, in his Intergraded Solar Cell And Battery invention discloses a solar cell using Lithium thin film material (see col. 1, lines 51-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the Lithium thin film solar cell of Little to Halperin in order to have a simple, low cost way of providing power to a electronic device.

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Regarding claim 2, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 1, wherein said wireless link is comprised of an RF link (see reference Park, col. 3, lines 57-67).

Regarding claim 3, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 1, wherein said wireless link is) comprised of a Bluetooth link (see reference Park, col. 3, lines 57-67).

Regarding claim 4, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 5, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 4, wherein said source is comprised of at least one solar cell (see reference Halperin, col. 4, lines 13-18; reference Little, col. 1, lines 51-60).

Regarding claim 6, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 5, wherein said source is further comprised of at least one battery (see reference Halperin, col. 4, lines 13-18).

Regarding claim 7, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 8, the claim has a limitation as that of claim 2, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 2.

Regarding claim 9, the claim has a limitation as that of claim 3, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 3.

Regarding claim 10, the claim has a limitation as that of claim 4, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 4.

Regarding claim 11, the claim has a limitation as that of claim 5, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 5.

Regarding claim 12, the claim has a limitation as that of claim 6, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 6.

Regarding claim 13, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 14, the combination of the teachings of Halperin, Park, and Little teaches a method as in claim 13, and further comprising a step of powering said keypad module using a solar cell located on said keypad module (see reference Halperin, col. 4, lines 13-18; reference Little, lines 51-60).

Regarding claim 15, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 17, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 19, the combination of the teachings of Halperin, Park, and Little teaches an information entry module as in claim 17, wherein said wireless link is a uni-directional link (see reference Halperin, col. 3, lines 57-67).

Regarding claim 20, the combination of the teachings of Halperin, Park, and Little teaches an information entry module as in claim 17, wherein said wireless link is a bi-directional link (see reference Halperin, col. 3, lines 57-67).

Response to Arguments

2. Applicant's arguments filed on 09/08/2004 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D DAO whose telephone number is 703-305-5589. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN C CHIN can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh Dao *mpd*
Art Unit 2682
January 11, 2005


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600